

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date  
11 August 2005 (11.08.2005)

PCT

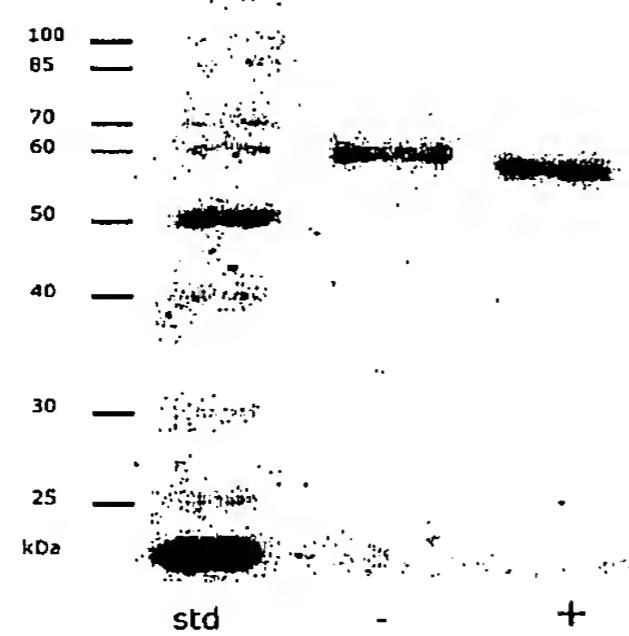
(10) International Publication Number  
**WO 2005/073367 A1**

- (51) International Patent Classification<sup>7</sup>: C12N 9/16, [DK/DK]; Bjergagervej 37, DK-3540 Lyngé (DK). ANDERSSON, Claes [SE/SE]; Tallåsvägen 5, S-187 43 Täby (SE). WEIGELT, Cecilia [SE/SE]; Banérsgatan 27, 1 tr., S-115 22 Stockholm (SE). MØLLER, Christer [SE/SE]; Lindvägen 26, S-246 53 Tullinge (SE). HYDÉN, Pia [SE/SE]; Dalgangen 6, S-182 74 Stocksund (SE).
- (21) International Application Number: PCT/DK2005/000068
- (22) International Filing Date: 30 January 2005 (30.01.2005)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
PA 2004 00144 30 January 2004 (30.01.2004) DK  
60/540,061 30 January 2004 (30.01.2004) US
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- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,

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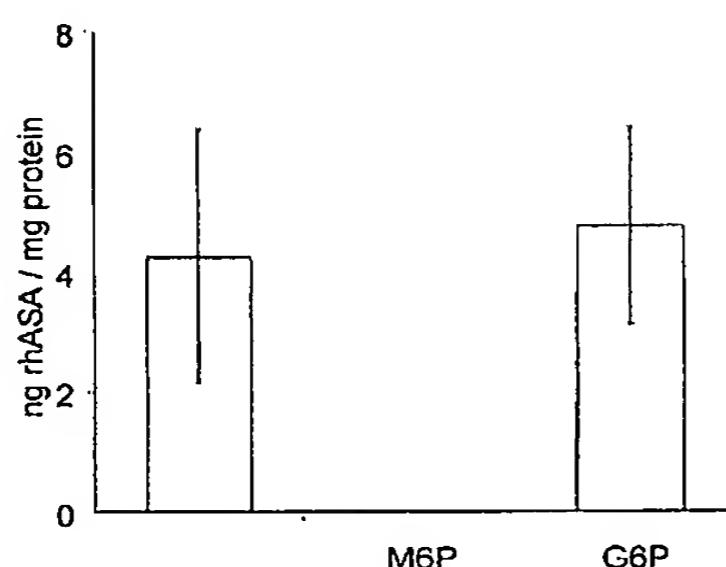
(54) Title: PRODUCTION AND PURIFICATION OF RECOMBINANT ARYLSULFATASE A

A



(57) Abstract: The present invention pertains to a process for production of recombinant arylsulfatase A in a cell culture system, the process comprising culturing a mammalian cell capable of producing rASA in liquid medium in a system comprising one or more bio-reactors; and concentrating, purifying and formulating the rASA by a purification process comprising one or more steps of chromatography. Other aspects of the invention provides a pharmaceutical composition comprising rASA, which is efficiently endocytosed via the mannose-6-phosphate receptor pathway *in vivo* as well as a rhASA a medicament and use of a rhASA for the manufacture of a medicament for reducing the galactosyl sulphatide levels within target cells in the peripheral nervous system and/or within the central nervous system in a subject. A final aspect of the invention provides a method of treating a subject in need thereof, said method comprising administering to said subject a pharmaceutical composition comprising a rhASA and thereby obtaining a reduction in the galactosyl sulphatide levels in target cells within said subject.

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WO 2005/073367 A1